

**I claim:**

1. A system for optimizing a borrower's use of mortgage insurance based upon projections of future home equity, comprising:

a central processing unit having electronic access to mortgage insurance

5 information stored in memory; and

a user interface for receiving user inputs indicative of a borrower's financial situation, closing costs, loan terms, and a house value appreciation assumption, and for providing those inputs to the central processing unit,

the central processing unit performing an analysis of the inputted information and

10 calculating a maximum dollar amount of a house purchase price that the borrower can afford, based upon an optimal loan-to-value ratio, achievable using mortgage insurance, that maximizes future home equity,

the central processing unit further calculating a maximum dollar amount of a house purchase price that the borrower can afford without using mortgage insurance,

15 the central processing unit providing results of the calculations to the user interface for output to the user.

2. The system of claim 1, wherein the central processing unit provides the results of the calculations in table format.

3. The system of claim 1, wherein the central processing unit provides a  
20 graphical representation of the results of the calculations.

4. The system of claim 1, further including:

an Internet connection for connecting the computer to a remote website for downloading software components and mortgage insurance information.

5. The system according to claim 1, wherein the central processing unit calculates the maximum dollar amount of a house that can be purchased by the borrower, constrained by cash available to the borrower to close.

6. The system according to claim 1, wherein the central processing unit  
5 calculates the maximum dollar amount of a house that can be purchased by the borrower, constrained by the borrower's income.

7. The system according to claim 1, wherein the central processing unit calculates the projected home equity after predetermined periods of time.

8. The system of claim 7, wherein the central processing unit calculates the  
10 cumulative projected future home equity for years one through ten.

9. A method for optimizing a borrower's use of mortgage insurance based upon projections of future home equity, comprising:

(a) entering inputs into a central processing unit having electronic access to mortgage insurance information stored in memory, the inputs including the borrower's  
15 financial situation, closing costs, loan terms, and a house value appreciation assumption;

(b) performing an analysis of the inputted information, using the central processing unit, and calculating a maximum dollar amount of a house purchase price that the borrower can afford, based upon an optimal loan-to-value ratio, achievable using mortgage insurance, that maximizes future home equity,

20 (c) calculating a maximum dollar amount of a house purchase price that the borrower can afford without using mortgage insurance; and

(d) outputting from the central processing unit the results of the calculations.

10. The method of claim 9, wherein step (d) includes:

providing the results of the calculations in table format.

11. The method of claim 9, wherein step (d) includes:

providing a graphical representation of the results of the calculations.

5 12. The method of claim 9, further including:

downloading software components and mortgage insurance information from a remote website.

13. The method of claim 9, wherein steps (b) and (c) include:

10 calculating the maximum dollar amount of a house that can be purchased by the borrower, constrained by cash available to the borrower to close.

14. The method of claim 9, wherein steps (b) and (c) include:

calculating the maximum dollar amount of a house that can be purchased by the borrower, constrained by the borrower's income.

15 15. The method of claim 9, wherein steps (b) and (c) include:

calculating the projected home equity after predetermined periods of time.

16. The method of claim 15, further including:

calculating the projected future home equity years one through ten.

17. The method of claim 9, wherein step (a) includes:

20 reviewing calculator assumptions and accessing background information on each variable.

18. The method of claim 17, wherein step (a) further includes:

making changes to model assumptions.

19. The method of claim 9, further including the following step (e), after  
step (d):

(e) reviewing background information and assumptions driving the calculator.

20. The method of claim 19, further including the following step (f), after

5 step (e):

(f) changing the assumptions and rerunning steps (b), (c), and (d).

11/11/2019 10:11 AM